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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
| 197152-593 | 09/14/98 | HASEGAWA | H BA-22624 |

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IM51/0119

EXAMINER

SKANE, C

ART UNIT

PAPER NUMBER

1751

DATE MAILED: 01/19/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

| | | |
|------------------------------|--------------------------------------|---------------------------------------|
| Office Action Summary | Application No. 09/152,593 | Applicant(s) Hasegawa et al |
| | Examiner Christine Skane | Group Art Unit 1751 |

Responsive to communication(s) filed on _____.

This action is **FINAL**.

Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

Claim(s) 1-8 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

Claim(s) _____ is/are allowed.

Claim(s) 1-8 is/are rejected.

Claim(s) _____ is/are objected to.

Claims _____ are subject to restriction or election requirement.

Application Papers

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The drawing(s) filed on _____ is/are objected to by the Examiner.

The proposed drawing correction, filed on _____ is approved disapproved.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All Some* None of the CERTIFIED copies of the priority documents have been

received.

received in Application No. (Series Code/Serial Number) 07/634,054.

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

Notice of References Cited, PTO-892

Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

Interview Summary, PTO-413

Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Claim Objections

1. Claims 3, 5, 7 and 8 are objected to because of the following informalities: The term "antifoaming agents" in claims 3, 5, 7 and 8 has been misspelled as "antiforming agents". Appropriate correction is required.

Priority

2. The examiner notes that applicant has claimed foreign priority based on Japanese patent application 2-121,133 submitted May 15, 1990. A review of parent application 07/634,054 reveals however that Japanese patent application 2-121,133 was submitted May 14, 1990. Thus, it appears that the date provided in the declaration is incorrect, and that applicant must provide a new declaration in which the proper date of submission of Japanese patent application 2-121,133 is given.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA

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1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claim 1 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-10 of U.S. Patent No. 5,447,647 to Ishida et al. Although the conflicting claims are not identical, they are not patentably distinct from each other because both Ishida et al and the present application disclose a fluid composition containing a chlorine-free fluorocarbon, a specific pentaerythritol ester and an epoxy compound.

5. Claims 1-8 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-10 of U.S. Patent No. 5,447,647 to Ishida et al, in view of U.S. patent 4,851,144 to McGraw et al.

Ishida et al is relied upon as set forth above. Ishida et al, however, do not claim the inclusion of the presently claimed conventional additives, nor do Ishida et al claim the inclusion of the presently claimed phosphorus compound.

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McGraw et al disclose a lubricant base composition for compression refrigeration comprising about 5 to 95% of a polyether polyol and about 95 to 5% of an ester (col. 2, lines 3-32). McGraw et al also teach that the lubricant base composition may be combined with various refrigerants, wherein the refrigerant R134a (1,1,1,2-tetrafluoroethane) is exemplified (col. 4, lines 3-20). McGraw et al further teach that various conventional additives including amine salts of phosphoric acid esters may be added to their lubricant base composition to enhance the properties of that lubricant base composition (col. 3, lines 35-68, specifically lines 50-52).

It would have been obvious to one of ordinary skill in the art to add the conventional lubricant additives of McGraw et al to the composition claimed by Ishida et al because McGraw et al teach that the addition of conventional lubricant additives to a lubricant base composition containing a significant amount of an ester lubricant enhances the performance of the lubricant base composition, and as the base oil of Ishida et al is also a polyol ester oil, it appears that the base oil of Ishida et al would benefit from the addition of the conventional lubricant additives of McGraw et al.

6. Claims 1-8 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 46-69 of copending Application No. 08/539,001. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications

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disclose a fluid composition comprising a chlorine-free fluorocarbon refrigerant and a specific pentaerythritol ester oil, wherein various other additives are included in the fluid composition.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

7. Claims 1-8 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-22 of copending Application No. 09/057,684. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications disclose a fluid composition comprising a chlorine-free fluorocarbon refrigerant and a specific pentaerythritol ester oil, wherein various other additives are included in the fluid composition.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

8. Claims 1-8 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-8 of copending Application No. 09/152,953. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications disclose a fluid

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composition comprising a chlorine-free fluorocarbon refrigerant and a specific pentaerythritol ester oil, wherein various other additives are included in the fluid composition.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

9. The following references are cited to teach the state of the art.

WO 90/12849 to Jolley discloses a liquid composition comprising a major amount of at least one fluorine-containing hydrocarbon and a minor amount of at least one soluble organic lubricant comprising at least one carboxylic ester of a polyhydroxy compound (Abstract). The preferred fluorine-containing hydrocarbon is R134a (1,1,1,2-tetrafluoroethane); page 24, second paragraph and Examples A thru E of pages 27 and 28. Jolley further teaches that the carboxylic ester of a polyhydroxy compound may be obtained by reacting pentaerythritol (paragraph spanning page 11 - page 12, as well as Examples 8-11) with various carboxylic acids (page 12 - page 14). It is further taught that various additives such as oxidation and thermal-stability improvers, phosphorous compounds, sterically hindered phenol antioxidants, etc (paragraph spanning page 26 - page 27) may be included in the liquid composition. However, as applicant has provided certified translations of each of the Japanese

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priority documents, and as Jolley has a publication date subsequent to the filing of the Japanese priority documents, WO 90/12849 to Jolley is not available as prior art.

U.S. patent 5,202,044 to Hagihara et al discloses a working fluid composition comprising (a) a hydrofluorocarbon; (b) an ester formed between a neopentylpolyol and a saturated branched aliphatic monocarboxylic acid having a carbon number of 7 to 9 and (c) a compound having an epoxycyclohexyl group and/or a compound having an epoxycyclopentyl group (Abstract). Hagihara et al further teach that the neopentyl polyol may include pentaerythritol (col. 3, lines 39-48). It is also taught that a triaryl phosphate may be added to the working fluid composition to improve the lubricity or to protect the metal surface from corrosion (col. 9, lines 21-28), and that other conventional additives, such as benzotriazoles and metal deactivators, may be added to the working fluid composition as well (col. 9, line 51 - col. 10, line 57).

U.S. patent 5,620,950 to Kamakura et al claims a refrigerant composition comprising (a) a synthetic ester oil, (b) an alicyclic epoxy compound and (c) a chlorine-free fluorinated hydrocarbon coolant (claim 1, column 8).

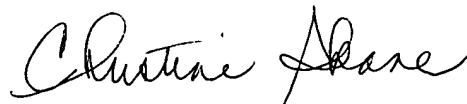
U.S. patent 5,653,909 to Muraki et al claims a refrigerating machine oil comprising (a) a carboxylated of pentaerythritol, (b) a phosphate and (c) a vinylcyclohexene dioxide (claim 1, column 12). Similarly, note claim 1 of U.S. patent 5,728,655 to Muraki et al.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine Skane whose telephone number is (703) 308-2526.

The examiner can normally be reached between about 8:00 AM and about 6:00 PM, E.S.T., Monday through Thursday, as well as alternate Fridays. The fax numbers for this Technology Center are:

- a. (703)305-3599 -- FOR AFTER-FINAL FAXES ONLY, and
- b. (703)305-7718 -- FOR ALL OTHER OFFICIAL FAXES. Any inquiry of a general nature or relating to the status of the application should be directed to the Tech. Center receptionist at (703)308-0661.



Christine Skane
Primary Examiner
Art Unit 1751

CS

January 15, 1999